



**MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION**

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**DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION**

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**Firestone Building Products Company, LLC  
250 West 96<sup>th</sup> Street  
Indianapolis, IN 46260**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: Firestone UltraPly TPO and TPO XR Single Ply Roof Systems over Lightweight Concrete Decks.**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 09-0902.11 and consists of pages 1 through 67.  
The submitted documentation was reviewed by Jorge L. Acebo.



**NOA No.: 12-0508.05  
Expiration Date: 05/18/16  
Approval Date: 02/28/13  
Page 1 of 67**

## ROOFING SYSTEM APPROVAL

<b><u>Category:</u></b>	Roofing
<b><u>Sub-Category:</u></b>	Single Ply Roofing
<b><u>Material:</u></b>	TPO
<b><u>Deck Type:</u></b>	Lightweight Concrete
<b><u>Maximum Design Pressure</u></b>	-467.5 psf

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<b><u>Product</u></b>	<b><u>Dimensions</u></b>	<b><u>Test Specifications</u></b>	<b><u>Product Description</u></b>
UltraPly TPO	Various	TAS 131-95	Reinforced TPO 045" to 080" thick membrane
UltraPly TPO XR 100	Various	TAS 131-95	Reinforced Fleece-backed TPO
UltraPly TPO XR 115	Various	TAS 131-95	Reinforced Fleece-backed TPO
UltraPly TPO Reinforced Curb Corner	Various	TAS 131-95	TPO curb flashing
UltraPly 18" Curb Flashing	Various	TAS 131-95	TPO curb flashing
UltraPly TPO Inside/Outside Corner	Various	TAS 131-95	Molded TPO for corner flashing
UltraPly TPO Large Pipe Flashing	Various	TAS 131-95	TPO flashing for large round penetrations
UltraPly TPO T-Joint Cover	Various	TAS 131-95	TPO flashing for T-joints
UltraPly TPO Penetration Kit	Various	TAS 131-95	A penetration sealing kit for UltraPly TPO
UltraPly TPO Walkway Pad	Various	TAS 131-95	TPO walkway pad
UltraPly TPO Coated Metal	Various	TAS 131-95	TPO laminated to hot-dipped galvanized steel for flashing
UltraPly TPO Premium Walkway Pad	Various	TAS 131-95	TPO walkway pad
UltraPly TPO Reinforced Split Pipe Boot	Various	TAS 131-95	TPO flashing for round penetrations 1" to 9" in diameter
UltraPly TPO 8" Reinforced Cover Strip	Various	TAS 131-95	8" wide 60 mil TPO cover strip
UltraPly TPO Universal Pipe Boot	Various	TAS 131-95	TPO flashing for round penetrations 1" to 6" in diameter
UltraPly TPO Unsupported Flashing	Various	TAS 131-95	Unreinforced TPO used for flashing
TPO QuickSeam Flashing	5-3/4" x 100'	TAS 131-95	Flashing material with pre-applied adhesive



UltraPly QuickSeam R.M.A. Strip	10" x 100'	Proprietary	Strip of UltraPly TPO with QuickSeam Tape for anchoring membrane to substrate
Single-Ply QuickPrime Primer	1 gallon & 3 gallon	Proprietary	Primer for TPO QuickSeam Flashing
EdgeGard System	Various	Various	Flashing materials and assemblies
XR Bonding Adhesive	5 gal. pail	Proprietary	Solvent based adhesive
UltraPly Bonding Adhesive	5 gal. pail	Proprietary	Solvent based adhesive
I.S.O. Stick	5 gal & 1500 ml	Proprietary	A dual component polyurethane adhesive.
I.S.O. Twin Pack Insulation Adhesive	1500 ml	Proprietary	A dual component polyurethane adhesive.

## APPROVED INSULATIONS:

**TABLE 2**

<b>Product Name</b>	<b>Product Description</b>	<b>Manufacturer (With Current NOA)</b>
ISO 95+ GL, ISO 95+ GL Tapered	Polyisocyanurate foam insulation	Firestone Bldg. Products
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia Pacific Gypsum LLC



## APPROVED FASTENERS:

**TABLE 3**

<b>Fastener Number</b>	<b>Product Name</b>	<b>Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
1.	Heavy Duty Fastener	#15 Fastener for steel, Wood, concrete decks	N/A	Firestone Bldg. Products
2.	All Purpose Fastener	#14 Fastener for steel, Wood, concrete decks	N/A	Firestone Bldg. Products
3.	2-3/8" Barbed Seam Plate	Membrane seam attachment plate	2-3/8" diameter	Firestone Bldg. Products
4.	Pre-Assembled fastener & plate	#14 w/insulation plate for steel, Wood, concrete decks	N/A	Firestone Bldg. Products
5.	Pre-Assembled Heavy Duty fastener & plate	#15 w/insulation plate for steel, Wood, concrete decks	N/A	Firestone Bldg. Products
6.	Heavy Duty Plus Fastener	Insulation and membrane fastener	Various	Firestone Bldg. Products
7.	Insulation Fastening Plate	Galvalume insulation plate	3" diameter	Firestone Bldg. Products
8.	HD Seam Plates	AZ55 or AZ50 galvalume insulation plate.	2-3/8" diameter	Firestone Bldg. Products
9.	HD Plus Seam Plate	Galvalume insulation plate	2 3/4" diameter	Firestone Bldg. Products
10.	Metal Batten Bar	Galvalume AZ55 batten strip	10' long, 1" wide	Firestone Bldg. Products
11.	Coiled Metal Batten Bar	Galvalume AZ55 batten strip	220' long, 1" wide	Firestone Bldg. Products
12.	Polymer Batten Strips	Polymer, corrosion –free, batten strip.	250' long, 3/4" or 1" wide	Firestone Bldg. Products

**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Underwriters Laboratories Inc.	01NK17982	UL 790	06/05/01
	00NK43467	UL 790	01/22/01
	03NK34486	UL 790	03/22/05
Factory Mutual Research Corporation	3006983	4470	02/08/00
	3004249	4470	11/03/99
	3003830	4470	05/26/99
	3001925	4470	05/24/99
	3014031	4470	07/22/02
	3014918	4470	12/17/03
	3012931	4470	04/04/04
	3016670	4470	04/29/04
	3017120	4470	04/30/04
	3020394	4470	09/03/04
	3022988	4470	01/28/05
	3014692	4470	08/05/03
	3033947	4470	05/29/09
Atlantic & Caribbean Roof Consulting, LLC	ACRC 05-002	TAS 114	01/18/05
	ACRC 02-002	TAS 114	01/07/03
	ACRC 05-001	TAS 114	01/18/05
Trinity   ERD	02764.09.05	FM 4470/TAS 114	09/09/05
	02762.03.05	FM 4470/TAS 114	03/30/05
	F8300.07.08	TAS 131/ ASTM D6878	07/30/08
	F8300.11.08-R3	TAS 131/ ASTM D6878	02/25/11
	F11080.09.08	TAS 114	09/18/08
	F10980.09.08	TAS 114	09/17/08
PRI Construction Materials Technologies, LLC	FBP-054-02-02, R1	FM 4474/TAS 114 D	02/07/13
	FBP-069-02-01, R1	FM 4474/TAS 114 J	02/07/13
	FBP-070-02-01, R1	FM 4474/TAS 114 J	02/07/13
	FBP-044-02-01, R2	TAS 114 H, J	10/04/12



## APPROVED ASSEMBLIES:

<b>Membrane Type:</b>	Single Ply, TPO, Reinforced
<b>Deck Type 4I:</b>	Lightweight Concrete, Insulated
<b>Deck Description:</b>	Minimum 200 psi Elastizell cast over structural concrete
<b>System Type A(1):</b>	One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+ GL Minimum 1.5" thick</b>	<b>N/A</b>	<b>N/A</b>
<b>Top Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Tapered ISO 95+ GL Minimum ½" thick start with a ¼" per ft. taper</b>	<b>N/A</b>	<b>N/A</b>

**Note: All insulation shall be adhered to the deck with I.S.O. Stick in ¾" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.**

**Membrane:** UltraPly TPO membrane fully adhered to the top insulation layer with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -90 psf (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Elastizell cast over structural concrete

**System Type A(2):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISO 95+ GL Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum ¼" thick	N/A	N/A

**Note: All insulation shall be adhered to the deck with Tite-Set Insulation Adhesive applied in 3-3½" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the top insulation layer with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -180 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 160 psi Elastizell cast over structural concrete

**System Type A(3):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+ GL</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime</b>		
<b>Minimum ¼" thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the deck with I.S.O. Stick in ¾" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the top insulation layer with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup> /gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -225 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Celcore cast over structural concrete

**System Type A(4):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+ GL</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime</b>		
<b>Minimum ¼" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the deck with Tite-Set Insulation Adhesive applied in 3-3½" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Membrane:** UltraPly TPO membrane fully adhered to the top insulation layer with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -222.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Mearlcrete cast over structural concrete

**System Type A(5):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+ GL</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime</b>		
<b>Minimum ¼" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the deck with Tite-Set Insulation Adhesive applied in 3-3½" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Membrane:** UltraPly TPO membrane fully adhered to the top insulation layer with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -240 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4I:** Lightweight Concrete, Insulated  
**Deck Description:** Minimum 300 psi Elastizell cast over structural concrete  
**System Type A(6):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Deck:** Minimum 2500 psi structural concrete

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -152.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4I:** Lightweight Concrete, Insulated  
**Deck Description:** Minimum 300 psi Elastizell cast over structural concrete  
**Deck:** Minimum 2500 psi structural concrete  
**System Type A(7):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

<b>Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISOGARD HD</b>		
<b>Minimum 1/2" thick</b>	<b>N/A</b>	<b>N/A</b>

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in ½ - ¾ in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -152.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4I:** Lightweight Concrete, Insulated  
**Deck Description:** Minimum 300 psi Celcore MF cast over structural concrete  
**Deck:** Minimum 2500 psi structural concrete  
**System Type A(8):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -130 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4I:** Lightweight Concrete, Insulated  
**Deck Description:** Minimum 300 psi Celcore MF cast over structural concrete  
**Deck:** Minimum 2500 psi structural concrete  
**System Type A(9):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b> Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in ½ - ¾ in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -130 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf. when tested with ES FM-90 fasteners in accordance with TAS 105.

**Deck:** Minimum 2500 psi structural concrete

**System Type A(10):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum ¼" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in ¾ - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -145 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf. when tested with ES FM-90 fasteners in accordance with TAS 105.

**Deck:** Minimum 2500 psi structural concrete

**System Type A(11):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ISOGARD HD Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -145 psf. (See General Limitation #9)





**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Elastizell cast over 22 ga. Steel Deck; Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using #12-24 x 1.25" hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 12" o.c.

**System Type A(12):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum ¼" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in ¾ - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -135 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Elastizell cast over 22 ga. Steel Deck; Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using #12-24 x 1.25" hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 12" o.c.

**System Type A(13):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b>		
<b>Minimum 1/2" thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -135 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Elastizell cast over 22 ga. Steel Deck

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 5 ft. spans using #14 hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 6" o.c.

**System Type A(14):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 200 psi Elastizell cast over 22 ga. Steel Deck

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 5 ft. spans using #14 hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 6" o.c.

**System Type A(15):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b> Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered to the insulation with UltraPly Bonding Adhesive at rate of 45-60 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf when tested with ES FM-90 fasteners in accordance with TAS 105. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(16):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -75 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf when tested with ES FM-90 fasteners in accordance with TAS 105. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(17):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b>		
Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -75 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(18):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(19):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b>		
Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(20):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Stick applied in 3/4 - 1in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type A(21):** One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>ISOGARD HD</b>		
Minimum 1/2" thick	N/A	N/A

**Note: All insulation shall be adhered to the LWC deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2 - 3/4 in. ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 2I:** Lightweight Concrete, Non-insulated  
**Deck Description:** minimum 200 psi Elastizell cast over steel deck.  
**Deck:** 18-22 ga. steel deck is secured to supports spaced 6 ft. o.c. with Traxx 5 fasteners spaced 6" o.c. and Traxx 1 fasteners 24" o.c. at the side laps.  
**System Type E(1):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** Mechanically attach UltraPly QuickSeam R.M.A. Strips through the lightweight and engaged to the steel deck with Heavy Duty Fasteners 6" o.c. in Coiled Metal Batten Strip centered within the 4" wide center section of the UltraPly QuickSeam R.M.A Strips in rows 10 ft. o.c. UltraPly TPO roof cover is adhered to the UltraPly QuickSeam R.M.A. Strips by first priming the underside of the roof cover, at the strip locations, with Single-Ply QuickPrime Primer and placing the primed portion of the roof cover onto the strips. Minimum 2" wide side laps are sealed with a minimum 1.5" wide heat weld.

Or mechanically attach UltraPly TPO membrane through the lightweight and engaged to the steel deck with Heavy Duty Plus fasteners 12" o.c. in 3/4" or 1" Polymer Batten Strip centered within the 6" wide side laps in rows 9-1/2 ft. o.c. The roof cover laps are sealed with a minimum 5" heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #7)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4I:** Lightweight Concrete, Non-insulated  
**Deck Description:** minimum 200 psi Elastizell cast over steel deck  
**Deck:** Minimum 22 ga. Grade E steel deck secured to supports space at maximum 6 ft. o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Side lap fastened with ITW Buildex Traxx/1 spaced at 24" o.c.  
**System Type E(2):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Barrier:** None.  
**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:  
**Fastening:** Membrane is mechanically attached using Heavy Duty Fasteners and HD Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 114" o.c. and sealed with a minimum 1.5" wide heat weld.  
**Maximum Design Pressure:** -52.5 psf (See General Limitation #7)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 2I:** Lightweight Concrete, Non-insulated  
**Deck Description:** minimum 200 psi Elastizell cast over steel deck.  
**Deck:** 18-22 ga., type B steel decking attached to steel supports spaced 6 ft. o.c. using Traxx 5 fasteners spaced 6" o.c. (at the bottom flute), and with side laps attached using Traxx 1 fasteners spaced 24" o.c.

**System Type E(3):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening #1:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 142" o.c. and sealed with a minimum 1.5" heat weld.  
***Maximum Design Pressure: -60 psf. (See General Limitation #7)***

**Fastening #2:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and 1" wide Coiled Metal Batten Strip with fasteners spaced 6" o.c. along the batten bar within minimum 6" wide laps. Laps are spaced at maximum 142" o.c. and sealed with a minimum 5" wide heat weld that encapsulates the fasteners and batten strip.  
***Maximum Design Pressure: -60 psf. (See General Limitation #7)***

**Fastening #3:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 114" o.c. and sealed with a minimum 1.5" heat weld.  
***Maximum Design Pressure: -67.5 psf. (See General Limitation #7)***

**Fastening #4:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and 1" wide Coiled Metal Batten Strip with fasteners spaced 6" o.c. along the batten bar within minimum 6" wide laps. Laps are spaced at maximum 114" o.c. and sealed with a minimum 5" wide heat weld that encapsulates the fasteners and batten strip.  
***Maximum Design Pressure: -67.5 psf. (See General Limitation #7)***

**Maximum Design Pressure:** See Fastening Options Above

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 2I:** Lightweight Concrete, Non-insulated  
**Deck Description:** minimum 200 psi Elastizell cast over steel deck.  
**Deck:** Minimum 22 gauge Grade C steel deck secured to supports space at maximum 6 ft. o.c. with ITW Buildex Traxx/5 spaced 6" o.c. Side laps fastened with ITW Buildex Traxx/1 spaced 24" o.c.  
**System Type E(4):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below.

**Fastening #1:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 12" o.c. within minimum 6" wide laps. Laps are spaced at maximum 90" o.c. and sealed with a minimum 1.5" heat weld.  
*(Maximum Design Pressure:-45 psf; See General Limitation #7)*

**Fastening #2:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and 1" metal batten centered within minimum 6" wide laps. Fasteners are spaced 6" o.c. along the batten bar. Batten bar rows are spaced 90" o.c. and sealed with a minimum 5" heat weld.  
*(Maximum Design Pressure:-82.5 psf; See General Limitation #7)*

**Fastening #3:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 90" o.c. and sealed with a minimum 5" heat weld.  
*(Maximum Design Pressure:-82.5 psf; See General Limitation #7)*

**Maximum Design Pressure:** See Fastening Options Above

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 200 psi Elastizell cast over steel deck.

**Deck:** Minimum 22 ga. Grade E steel deck secured to supports space at maximum 6 ft. o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Side lap fastened with ITW Buildex Traxx/1 spaced at 24" o.c.

**System Type E(5):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening #1:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 12" o.c. within minimum 6" wide laps in rows 9'-6" o.c. Laps sealed with a minimum 5" wide hot air heat weld.  
*(Maximum Design Pressure:-45 psf; See General Limitation #7)*

**Fastening #2:** Membrane is mechanically attached using Heavy Duty Fasteners and 1" wide Metal Batten Bars centered within the 6" wide side laps. Fasteners spaced 6" o.c. along the batten bar. Batten bar rows were spaced 9'-6" o.c. Laps sealed with a minimum 5" wide hot air heat weld.  
*(Maximum Design Pressure:-75 psf; See General Limitation #7)*

**Fastening #3:** Membrane is mechanically attached using Heavy Duty Fasteners and 3/4" wide Polymer Batten Strips centered within the 6" wide side laps. Fasteners spaced 6" o.c. along the batten bar. Batten bar rows were spaced 9'-6" o.c. Laps sealed with a minimum 5" wide hot air heat weld.  
*(Maximum Design Pressure:-60 psf; See General Limitation #7)*

**Fastening #4:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and 3/4" wide Polymer Batten Strips centered within the 6" wide side laps. Fasteners spaced 6" o.c. along the batten bar. Batten bar rows were spaced 9'-6" o.c. Laps sealed with a minimum 5" wide hot air heat weld.  
*(Maximum Design Pressure:-75 psf; See General Limitation #7)*

**Fastening #5:** Membrane is mechanically attached using Heavy Duty Fasteners and HD Seam Plates 12" o.c. within minimum 6" wide laps. Laps are spaced 90" o.c. and sealed with minimum 1.5" heat weld.  
*(Maximum Design Pressure:-45 psf; See General Limitation #7)*

**Fastening #6:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 12" o.c. within minimum 6" wide laps. Laps are spaced a maximum 114" o.c. and sealed with minimum 1.5" heat weld.  
*(Maximum Design Pressure:-45 psf; See General Limitation #7)*

**Fastening #7:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and HD Plus Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 90" o.c. and sealed with minimum 5" heat weld.

***(Maximum Design Pressure:-90 psf; See General Limitation #7)***

**Fastening #8:** Membrane is mechanically attached using Heavy Duty Plus Fastener and 1" Metal Battens centered with the minimum 6" wide laps. Fasteners are spaced 6" o.c. along the batten bars. Batten rows are spaced at maximum 90" o.c. and sealed with minimum 5" heat weld.

***(Maximum Design Pressure:-97.5 psf; See General Limitation #7)***

**Maximum Design Pressure:** See Fastening Options Above



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 2I:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 200 psi Elastizell cast over steel deck.

**Deck:** 18-22 ga., type B steel decking attached to steel supports spaced 6 ft. o.c. using Traxx 5 fasteners spaced 6" o.c. (at the bottom flute) two fasteners at each bearing attachment point, and with side laps attached using Traxx 1 fasteners spaced 14" o.c.

**System Type E(6):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening:** Heavy Duty Plus fasteners spaced 6 in. o.c. along 1" wide Coiled Metal Batten Strip centered within the 6 in. wide laps spaced 4-½ ft. o.c. The roof cover side laps are sealed with a minimum 5 in. wide heat weld.

**Maximum Design Pressure:** -112.5 psf. (See General Limitation #7)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 2I:** Lightweight Concrete, Non-insulated  
**Deck Description:** Minimum 200 psi Elastizell cast over steel deck.  
**Deck:** 18-22 ga., Grade 80 steel decking attached to steel supports spaced 6 ft. o.c. using Traxx 5 fasteners spaced 6" o.c. (at the bottom flute), and with side laps attached using Traxx 1 fasteners spaced 24" o.c.  
**System Type E(7):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening #1:** Membrane is mechanically attached using Heavy Duty Fasteners and HD Seam Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 142" o.c. and sealed with a minimum 1.5" heat weld.  
**Maximum Design Pressure: -52.5 psf. (See General Limitation #7)**

**Fastening #2:** Membrane is mechanically attached using Heavy Duty Fasteners and 1" wide Coiled Metal Batten Strip with fasteners spaced 6" o.c. along the batten bar within minimum 6" wide laps. Laps are spaced at maximum 142" o.c. and sealed with a minimum 5" wide heat weld that encapsulates the fasteners and batten strip.  
**Maximum Design Pressure: -52.5 psf. (See General Limitation #7)**

**Fastening #3:** Membrane is mechanically attached using Heavy Duty Plus Fasteners and ¾" or 1" Polymer Batten Strips with fasteners spaced 6" o.c. along the batten bar in rows spaced 142" o.c. and along one intermediate field row centered in the field of the sheet. Side laps are sealed with a minimum 5" heat weld and the intermediate field row is covered with a minimum 5" wide strip of UltraPly TPO and sealed with a minimum 1.5" heat weld on either side of the batten.  
**Maximum Design Pressure: -135 psf. (See General Limitation #7)**

**Fastening #4:** Membrane is mechanically attached using Heavy Duty Fasteners and ¾" or 1" Polymer Batten Strips with fasteners spaced 6" o.c. along the batten bar within minimum 6" wide laps. Laps are spaced at maximum 68" o.c. and sealed with a minimum 5" wide heat weld that encapsulates the fasteners and batten strip.  
**Maximum Design Pressure: -82.5 psf. (See General Limitation #7)**

**Maximum Design Pressure:** See Fastening Options Above

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 300 psi Generic Cellular Lightweight Concrete cast over steel deck.  
\*Lightweight concrete should record a Minimum Characteristic Resistance Force (MCRF) of 390 lbf when tested Heavy Duty Fasteners through the LWC into the steel deck in accordance with TAS 105.

**Deck:** Minimum 22 gauge B-deck is secured to supports spaced a maximum of 6 ft. o.c. with #12-24 x 1-1/4" HWH SD screws with 1/2" washers spaced at 6" o.c. Side lap fasteners secured with #1/4-14 x 7/8" HWH SD screws with 1/2" washers spaced 12" o.c.

**System Type E(8):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening:** Membrane is mechanically attached using Polymer Batten Strip spaced 4 ft. o.c. and fastened to deck with Heavy Duty fasteners spaced 6" o.c. along the batten strip. A 6" wide UltraPly TPO Cover Strip is heat welded over battens with 1-1/2 in. wide heat welds.

**Maximum Design Pressure:** -97.5 psf. (See General Limitation #7)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** minimum 300 psi Generic Cellular Lightweight Concrete cast over steel deck. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 450 lbf when tested with Heavy Duty Fasteners through the LWC into the steel deck in accordance with TAS 105.

**Deck:** Minimum 22 gauge B-deck is secured to supports spaced a maximum of 6 ft. o.c. with #12-24 x 1-1/4" HWH SD screws with 1/2" washers spaced at 6" o.c. Side lap fasteners secured with #1/4-14 x 7/8" HWH SD screws with 1/2" washers spaced 12" o.c.

**System Type E(9):** Membrane mechanically attached.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 mechanically fastened through the lightweight concrete and engaged to the steel deck as described below:

**Fastening:** Membrane is mechanically attached using Polymer Batten Strip spaced 4 ft. o.c. and fastened to deck with Heavy Duty fasteners spaced 6" o.c. along the batten strip. A 6" wide UltraPly TPO Cover Strip is heat welded over battens with 1-1/2 in. wide heat welds.

**Maximum Design Pressure:** -112.5 psf. (See General Limitation #7)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Celcore Lightweight Concrete, Minimum 300 psi, min 40.0 pcf. Slurry coat is followed by 1" holey board and a 2" top coat. PVA curing compound applied to LWC at a rate of 0.33 gal/sq.

**Deck:** 22 ga, type B, 0.5% vented steel deck attached at 6 ft. spans using Tek/5 screws spaced 6" o.c. Side laps attached with Tek/1 screw spaced 12" o.c.

**System Type F(1):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive, substrate only, at are rate of 70-90 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 39 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture is poured over the steel deck. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 6 ft. o.c. with 3/8" welding washers spaced at 6" o.c. Side lap fasteners secured with two ITW Buildex Traxx/1 fasteners evenly spaced between the purlins (24" o.c.).

**System Type F(2):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -52.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 40 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture is poured over the steel deck. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 6 ft. o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Side lap fasteners secured with two ITW Buildex Traxx/1 fasteners evenly spaced between the purlins (24" o.c.).

**System Type F(3):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -60 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Elastizell Lightweight Insulation Concrete, minimum 300 psi. A 1/8" thick slurry coat of LWC is followed by 1" EPS Hol-E – Board and a 2" LWC top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using #12-24 x 1.25" hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 12" o.c.

**System Type F(4):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO fully adhered with UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9).



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Generic Cellular Lightweight Concrete, Minimum 300 psi. Slurry coat is followed by 1" holey board and a 2" top coat. Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2ft.<sup>2</sup> \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf when tested with the FM-90 fasteners in accordance with TAS 105.

**Deck:** 22 ga, type B, 0.5% vented steel deck attached at 6 ft. spans using Tek/5 screws spaced 6" o.c. Side laps attached with Tek/1 screw spaced 12" o.c.

**System Type F(5):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive, substrate only, at are rate of 70-90 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -75 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Elastizell Lightweight Insulation Concrete, minimum 300 psi. A 1/8" thick slurry coat of LWC is followed by 1" EPS Hol-E – Board and a 2" LWC top coat.

**Deck:** 22 ga. X 1-5" deep corrugated, marlin type B, vented, G-90 finish steel deck attached at 6 ft. spans using #12-24 x 1 1/4" hex head Tek screws spaced 6" o.c. Side laps attached with #14-1" Tek screws spaced 12" o.c.

**System Type F(6):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive, substrate only, at are rate of 70-90 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -82.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 40 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture is poured over the steel deck. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 5 ft. o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Side laps fastened with ITW Buildex Traxx/1 spaced at midspan.

**System Type F(7):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -82.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 46 pcf wet cast density; 1/8" thick slurry of Elastizell Range II Lightweight Insulating Concrete is poured over the steel deck. Min 1" thick Dyplast Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Elastizell Range II Lightweight Insulating Concrete. After curing for two days LWIC system is mechanically attached to deck with Insulation Fastening Plates and Heave Duty Fasteners applied at 2 ft<sup>2</sup>.

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 6 ft. o.c. with 3/8" welding washers spaced at 6" o.c. Side lap fasteners secured with two ITW Buildex Traxx/1 fasteners evenly spaced between the purlins (24" o.c.).

**System Type F(8):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -82.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Celcore Lightweight Concrete, Minimum 300 psi, min 40.0 pcf. Slurry coat is followed by 1" holey board and a 2" top coat. PVA curing compound applied to LWC at a rate of 0.33 gal/sq. Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through to steel deck at 1 per 2 ft.<sup>2</sup>

**Deck:** 22 ga, type B, 0.5% vented steel deck attached at 6 ft. spans using Tek/5 screws spaced 6" o.c. Side laps attached with Tek/1 screw spaced 12" o.c.

**System Type F(9):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive, substrate only, at are rate of 70-90 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 40 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture is poured over the steel deck. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 4 ft. o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Side laps fastened with ITW Buildex Traxx/1 spaced at midspan.

**System Type F(10):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 39 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal

**Deck:** Structural Concrete

**System Type F(11):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design**

**Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 45 pcf wet cast density; 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture is poured over the steel deck. Min 1" thick Dyplast Holey Board, Carpenter Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray applied at a minimum rate 300 ft<sup>2</sup>/gal. After curing for two days LWIC system is mechanically attached to deck with Insulation Fastening Plates and Heave Duty Fasteners applied at 2 ft<sup>2</sup>.

**Deck:** Minimum 22 gauge Wheeling Corrugating Company BW galvanized deck or BW slotted galvanized deck is secured to supports space at maximum 6 ft. o.c. with 3/8" welding washers spaced at 6" o.c. Side lap fasteners secured with two ITW Buildex Traxx/1 fasteners evenly spaced between the purlins (24" o.c.).

**System Type F(12):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4:** Lightweight Concrete, Non-insulated  
**Deck Description:** Minimum 39 pcf wet cast density; 2" thick Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture. After allowing to cure, Celcore PVA Curing Compound is spray or roller applied at a minimum rate 300 ft<sup>2</sup>/gal  
**Deck:** Structural Concrete  
**System Type F(13):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4:** Lightweight Concrete, Non-insulated  
**Deck Description:** Minimum 43 pcf wet cast density; 1/8" thick slurry of Elastizell Range II Lightweight Insulating Concrete. Min 1" thick Dyplast Holey Board or Cellofoam Holey Board is placed into the wet concrete, followed by a minimum 2" thick top coat of Elastizell Range II Lightweight Insulating Concrete.  
**Deck:** Structural Concrete  
**System Type F(14):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5" heat weld.

**Maximum Design Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Elastizell Lightweight Insulation Concrete, minimum 300 psi. A 1/8" thick slurry coat of LWC is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using #12-24 x 1.25" hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 12" o.c.

**System Type F(15):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO fully adhered to LWC deck using UltraPly Bonding Adhesive applied to both the substrate and the underside of the roof cover for a combined rate of 120 ft<sup>2</sup>/gal. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -135 psf. (See General Limitation #9).

**Membrane Type:** Single Ply, TPO, Reinforced  
**Deck Type 4:** Lightweight Concrete, Non-insulated  
**Deck Description:** Minimum 43 pcf wet cast density; 2” thick coat of Elastizell Range II  
Lightweight Insulating Concrete.  
**Deck:** Structural Concrete  
**System Type F(16):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 adhered with XR Bonding  
Adhesive at a rate of 70-90 ft<sup>2</sup>/gallon. Side laps are secured with a minimum 1.5”  
heat weld.

**Maximum Design  
Pressure:** -210 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Generic Cellular Lightweight Concrete, Minimum 200 psi. Slurry coat is followed by 1" holey board and a 2" top coat. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 95 lbf when tested with the FM-90 fasteners in accordance with TAS 105.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(17):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 fully adhered with XR Bonding Adhesive, substrate only, at a rate of 70-90 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -467.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 300 psi Elastizell Lightweight Insulation Concrete cast over structural concrete. A 1/8" thick slurry of Elastizell Lightweight Insulation Concrete with Elastizell Foam Agent, ZellCrete Fibers, Portland Cement and Water is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat applied after overnight cure.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(18):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -132.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 30 psi Celcore MF cast over structural concrete. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture, Portland Cement, Water and Celcore PVA Curing Compound is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Curing compound applied after setting of top coat at 300 ft<sup>2</sup>/gal.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(19):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -140 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 200 psi Generic Cellular Lightweight Concrete cast over structural concrete. A 1/8" thick slurry coat of cellular lightweight concrete composed of foam agent, Portland cement and water and is followed by 1" EPS holey board and a 2" top coat applied after overnight cure. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 36.7 lbf when tested with 1.7" LWC Base-Ply fasteners in accordance with TAS 105.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(20):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -125 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over structural concrete. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore HS Rheology Modifying Admixture, Portland Cement, Water and Celcore PVA Curing Compound is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Curing compound applied after setting of top coat at 300 ft<sup>2</sup>/gal.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(21):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO membrane fully adhered to the substrate with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -130 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 200 psi Generic Cellular Lightweight Concrete cast over structural concrete. A 1/8" thick slurry coat of cellular lightweight concrete composed of foam agent, Portland cement and water and is followed by 1" EPS holey board and a 2" top coat applied after overnight cure. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 36.7 lbf when tested with 1.7" LWC Base-Ply fasteners in accordance with TAS 105.

**Deck:** Minimum 2500 psi structural concrete

**System Type F(22):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -105 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 300 psi Elastizell cast over 22 ga. Steel Deck. A 1/8" thick slurry coat of LWC is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes HD fasteners with 3" Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using #12-24 x 1.25" hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 12" o.c.

**System Type F(23):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -132.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4:** Lightweight Concrete, Non-insulated

**Deck Description:** Minimum 200 psi Elastizell cast over 22 ga. Steel Deck. A 1/8" thick slurry coat of LWC is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 5 ft. spans using #14 hex head Tek screws spaced 6" o.c. (each flute) Side laps attached with #14 x 1" hex head Tek screws spaced 6" o.c.

**System Type F(24):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf when tested with ES FM-90 fasteners in accordance with TAS 105. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(25):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design**

**Pressure:** -75 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Generic Cellular Lightweight Concrete cast over structural concrete. \*Lightweight Concrete should record a Minimum Characteristic Resistance Force (MCRF) of 100 lbf when tested with ES FM-90 fasteners in accordance with TAS 105. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(26):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design**

**Pressure:** -75 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(27):** Membrane adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous 3/4 - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design**

**Pressure:** -90 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing Compound applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat. Supplemental attachment includes Firestone HD fasteners with Insulation Fastening Plates through Lightweight Concrete to steel deck at 1 per 2 ft<sup>2</sup>

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(28):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design**

**Pressure:** -90 psf. (See General Limitation #9)



**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(29):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO membrane fully adhered with UltraPly Bonding Adhesive at a rate of 45-60 ft<sup>2</sup>/gallon. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #9)

**Membrane Type:** Single Ply, TPO, Reinforced

**Deck Type 4I:** Lightweight Concrete, Insulated

**Deck Description:** Minimum 300 psi Celcore MF cast over steel deck. A 1/8" thick slurry of Celcore MF Cellular concrete with Celcore PVA Curing applied at a rate of 0.33 gal/sq and is followed by 1" EPS Hol-E – Board and a 2" Lightweight Concrete top coat.

**Deck:** 22 ga, type B, G-90 finished, 1.5" vented steel deck attached to supports at 6 ft. spans using Tek/5 screws spaced 6" o.c. (each flute) Side laps attached with Tek/1 screws spaced 12" o.c.

**System Type F(30):** Membrane fully adhered to LWC deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

**Membrane:** UltraPly TPO XR 100 or UltraPly TPO XR 115 membrane adhered with XR Stick Membrane Adhesive applied in continuous  $\frac{3}{4}$  - 1 in. wide ribbons spaced 12" o.c. The roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

**Maximum Design Pressure:** -45 psf. (See General Limitation #9)

## **LIGHTWEIGHT INSULATING CONCRETE SYSTEM LIMITATIONS:**

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For Systems where specific lightweight insulating concrete is referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

## **GENERAL LIMITATIONS:**

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer.
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

**Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant

**(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**

8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).

**(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**

10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

## **END OF THIS ACCEPTANCE**



NOA No.: 12-0508.05  
Expiration Date: 05/18/16  
Approval Date: 02/28/13  
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